



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,623	07/28/2003	Reuven Unger	P23593	4331
7055 7590 03/23/2007 GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			EXAMINER GARCIA, ERNESTO	
			ART UNIT 3679	PAPER NUMBER

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	03/23/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 03/23/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com
pto@gbpatent.com

Office Action Summary

Application No.

10/627,623

Applicant(s)

UNGER ET AL.

Examiner

Ernesto Garcia

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2006 and 03 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4,8,13 and 25-33 is/are pending in the application.
- 4a) Of the above claim(s) 4,8,13,25,29 and 33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-7,9,10,12,14,26-28 and 30-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Election of Species

Claims 4, 8, 13, 25, 29, and 33, are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on January 3, 2007.

Applicant's election with traverse of Group I in the reply filed on January 3, 2007 is acknowledged. The traversal is on the ground(s) that group I does not preclude the use of the claimed product as a coupling in a power transmission between a driving member and a drive member and the examiner has not provided a burden to examine the method claims. This is not found persuasive because the remarks admit that Group I can be used in a different method, i.e., coupling a power transmission between a driving member and a driven member. Further, applicants have failed to show that a coextensive search is a reason for not requiring a restriction requirement and that "search" is the only criteria that goes into determining the existence of a "serious burden". Accordingly, to have to examine two or more patentably distinct inventions in

Art Unit: 3679

the same application, including consideration of individual arguments for each invention would impart a serious burden upon the examiner.

The requirement is still deemed proper and is therefore made FINAL.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the spring that supports a rod at a central portion of the spring (claim 1, line 2), "the first inner diameter, the second inner diameter and a third inner diameter that is smaller than the second inner diameter" (claim 10, lines 7-8), and the spring secured to the rod (claims 30-33) must be shown on the elected species, Figs. 3, 4, 5A, 5B, 6, 7A, or 7B, or the feature canceled from the claims. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended". If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and

Art Unit: 3679

appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: "a first inner diameter", "a second inner diameter", and a "third inner diameter in this order" (claim 2, lines 2-3).

Claim Objections

Claims 5 and 7 are objected to because of the following informalities:

regarding claim 5, "the connection" in line 12 should be --connection-- since no connection has taken place between the spring support and the coupling ring in a positive manner. Note that this claim is a listing of parts; and,

regarding claim 7, "potion" in line 2 should be --portion--. Appropriate correction is required. For purposes of examining the instant invention, the examiner has assumed these corrections have been made.

Claim Rejections - 35 USC § 102

Claims 1, 2, 26, and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Bauer, 3,648,999.

Regarding claim 1, Bauer discloses, in Figure 1, a securing device comprising a spring **15**, a rod **18**, a generally annular spring support **12** and a generally annular coupling ring **A1** (see marked-up attachment). The spring **15** supports the rod **18** at a central portion of the spring and biases the rod **18**. The spring support **12** includes a spring mount **A2** projecting in an inner side of the spring support **12**. An outer peripheral portion of the spring **15** is prevented from movement by the spring support **12** and the coupling ring.

Regarding claim 2, the spring support **12** has a first inner diameter **A5** (see marked-up attachment), a second inner diameter **A6**, and a third inner diameter **A7** in this order. The spring mount **A2** formed a region between the second inner diameter **A6** and the third inner diameter **A7**.

Regarding claim 26, the spring support **12** and the coupling ring **A1** clamp the outer peripheral portion of the spring **15** therebetween.

Regarding claim 30, the spring **15** is secured to the rod **18**.

Claims 1-3, 26, and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Riley et al., 4,910,376.

Regarding claim 1, Riley et al. disclose, in Figure 5, a securing device comprising a spring **22**, a rod **200**, a generally annular spring support **23** and a generally annular coupling ring **A1** (see marked-up attachment). The spring **22** supports the rod **200** at a central portion of the spring **22** and biases the rod **200**. The spring support **23** includes a spring mount **A2** projecting in an inner side of the spring support **23**. An outer peripheral portion of the spring **22** is prevented from movement by the spring support **23** and the coupling ring **A1**.

Regarding claim 2, the spring support **23** has a first inner diameter **A5** (see marked-up attachment), a second inner diameter **A6**, and a third inner diameter **A7** in this order. The spring mount **A2** formed a region between the second inner diameter **A6** and the third inner diameter **A7**.

Art Unit: 3679

Regarding claim 3, a first thread is formed on an inner periphery of a portion of the first inner diameter **A5**, and a second thread is formed on an outer periphery of the coupling ring **A1**. The first thread and the second thread threadably engage each other.

Regarding claim 26, the spring support **23** and the coupling ring **A1** clamp the outer peripheral portion of the spring **22** therebetween.

Regarding claim 30, the spring **22** is secured to the rod **200** (col. 2, lines 46-51).

Claims 5, 6, 9, 27, and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Cox et al., 2,753,544.

Regarding claim 5, Cox et al. discloses, in Figure 1, a securing device comprising a spring **24**, a rod **14**, a generally annular spring support **11**, and a generally annular coupling ring **36**. The spring **24** supports the rod **14** at a central portion of the spring **24** and biases the rod as the rod **14** elastically moves back and forth. The spring support **11** includes a spring mount (the shoulder) projecting in an inner side of the spring support **11**. Fixation holes extend through the coupling ring **36** (col. 2, lines 42-46). Applicants should note that the spring **24** is able to support a rod such that the rod elastically moves back and forth. Note that the fixation holes facilitate connection of the spring support to the coupling ring, and the coupling ring **36** is configured to connect to the spring support.

Regarding claim 6, the spring support **11** has a first inner diameter **A5** (see marked-up attachment), a second inner diameter **A6**, and a third inner diameter **A7**. The spring mount (the shoulder) projects radially inwardly at a region between the second inner diameter **A6** and the second inner diameter **A7**.

Regarding claim 9, the fixation holes are at an interval of one of approximately 90 degrees and 180 degrees on the coupling ring (note that 120 degrees is shown for the holes of the spring in Figure 3 and is approximately 90 degrees).

Regarding claim 27, the spring support **11** and the coupling ring **36** clamp the outer peripheral portion of the spring **24** therebetween.

Regarding claim 31, the spring **24** is secured to the rod **14**.

Claims 5-7, 9, 27, and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Petty, 2,348,225.

Regarding claim 5, Petty discloses, in Figure 1, a securing device comprising a spring **21**, a rod **27**, a generally annular spring support **10**, and a generally annular coupling ring **31**. The spring **21** supports the rod **27** at a central portion of the spring **21** and biases the rod as the rod **27** elastically moves back and forth. The spring support

Art Unit: 3679

10 includes a spring mount **30** projecting in an inner side of the spring support **10** (col. 4, lines 30-35). Fixation holes **34** extend through the coupling ring **31**. Applicants should note that the spring **21** is able to support a rod such that the rod elastically moves back and forth. Note that the fixation holes **34** facilitate connection of the spring support to the coupling ring, and the coupling ring **31** is configured to connect to the spring support.

Regarding claim 6, the spring support **10** has a first inner diameter **A5** (see marked-up attachment), a second inner diameter **A6**, and a third inner diameter **A7**.

Regarding claim 7, a first thread is formed on an inner periphery of a portion of the first inner diameter **A5**. A second thread is formed on an outer periphery of the coupling ring **31**. The first thread and the second thread engage each other.

Regarding claim 9, the fixation holes **34** are at an interval of one of approximately 90 degrees and 180 degrees on the coupling ring **31**.

Regarding claim 27, the spring support **10** and the coupling ring **31** clamp the outer peripheral portion of the spring **21** therebetween.

Regarding claim 31, the spring **21** is secured to the rod **27**.

Claim Rejections - 35 USC § 103

Claims 10, 12, 14, 28, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petty, 2,348,225, in view of Muellenberg, 5,067,847.

Regarding claim 10, Petty discloses, in Figure 1, a securing device comprising a spring **21**, a rod **27**, a generally annular spring support **10**, and a generally annular coupling ring **31**. The spring support **10** includes a spring mount **30** projecting in an inner side of the spring support **10** and configured to support the spring **21**. The spring support **12** has three inner diameters consisting of, in this order, a first inner diameter **A5**, a second inner diameter **A6**, and a third inner diameter **A7** that is smaller than the second inner diameter **A7**. The spring mount **10** is positioned at a region of the spring support **10** located between the second inner diameter **A5** and the third inner diameter **A7**. Holes **34** are in the coupling ring **31**. However, Petty fails to disclose the holes **34** being threaded. Muellenberg teaches between Figures 1 and 3, holes **29** that are not threaded and holes that are threaded **9** to place withdrawal screws and release a ring in a threaded opening (col. 4, lines 13-17, and col. 5, lines 1-6). Therefore, as taught by Muellenberg, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use threaded holes to place withdrawal screws to release the connection between the ring and the spring support. Note that the same withdrawal screws can be used to fasten.

Regarding claim 12, a first thread is formed on an inner periphery of a portion of the first inner diameter A5. A second thread is formed on an outer periphery of the coupling ring 31. The first thread and the second thread engage each other.

Regarding claim 14, the threaded holes 34, as modified, are at an interval of approximately 90 degrees or 180 degrees on the coupling ring 31.

Regarding claim 28, the spring support 10 and the coupling ring 31 clamp the outer peripheral portion of the spring 21 therebetween.

Regarding claim 32, the spring 21 is secured to the rod 27.

Response to Arguments

Applicant's arguments with respect to claims 1-3, 5-7, 9, 10, 12, and 14 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicants' amendment necessitated the new ground(s) of rejection presented in this Office action. In particular, the new limitations "that supports a rod at a central portion of the spring and biases the rod as the rod elastically moves back and forth" in

Art Unit: 3679

claims 1, 5, and 10, lines 2-3, necessitated the new grounds of rejection. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernesto Garcia whose telephone number is 571-272-7083. The examiner can normally be reached from 9:30-5:30. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached at 571-272-7087.

Art Unit: 3679

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



E.G.

March 14, 2007

Attachment: one marked-up page of Bauer, 3,648,999
one marked-up page of Riley et al., 4,910,376
one marked-up page of Cox et al., 2,753,544
one marked-up page of Petty, 2,348,225

DANIEL P. STODOLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3800

Bauer, 3,648,999



